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SCIRRHOUS PANCREAS.

[Read before the Boston Society for Medical Observation, June 30th, 1859, and communicated for the Boston Medical and Surgical Journal.]

BY CHARLES E. BUCKINGHAM, M.D.

THE morbid specimens are from a lady of 72 years of age, who died, on the 16th of June, after an excessively painful sickness of several months. At what time the disease began, I have no means of determining. She was of that determined, uncomplaining disposition which does not allow sickness to be known, until it becomes intolerable. I was first called to her on the 28th of January, 1859, and finding her complaining simply of pain to the left of the epigastrium, and similar pain in some of the muscles of her limbs, loss of appetite and weakness, I prescribed small doses of tincture of guaiacum. This was continued several days, with slight amendment. Soon after, the skin was noticed to be of a yellowish hue, which did not extend to the conjunctival membrane. The discharges had then become quite clay-colored. On the 1st of February she got a grain of podophyllin and six grains of leptandrin, in two doses. On the 2d of February, eight grains of compound cathartic pill. The whole moved her bowels pretty thoroughly, without nauseating, but the movement was attended with griping. There was no change produced in the color of the feces. On the 3d, for the purpose of keeping up a laxative effect, and at the same time acting as an alterative, two grains of leptandrin, with as much conium, were directed every six hours. On the following day, an equal amount of compound cathartic pill was substituted for the leptandrin. No apparent effect was produced by either. The yellowness of the surface steadily increased; the pain remained as at first. The appetite began to fail, and on the night of February 18th, she was suddenly seized with great faintness and sinking, for which stimulants were freely used, with relief. Dr. John Ware saw her, at this time, and after the most careful examination, not being able to decide upon the nature of the disease, it was determined to commence an alterative course. A grain and a quarter of calomel was taken each night, at bed-time. It was given in powder with sugar. The pain now seemed to

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change its position. Leaving the epigastric region and the limbs entirely, it followed a direct line, down the abdomen, obliquely to a point about two inches in front of the anterior superior spinous process of the ilium, and from thence across to the point directly behind it, in the back. Here it remained for the rest of her life. No tumor was ever discoverable, in any part of the body, and there was no pain elsewhere. The tenderness was where the pain was originally, that is to say, on the left of the epigastric region. There was never any tenderness nor tumor discoverable near the liver, nor was the liver at any time to be felt. The only indication of hepatic trouble was in the color of the skin.

From the 18th of February mercurials were continued without intermission, the only change being to the protoiodide, on the 2d of March, up to March 14th. None of the specific effects of the medicine were noticed, and it was discontinued. On the 24th of February, it was found necessary to give opiates, and they were used in various forms, from one to three doses a day, each dose being equal to about a fourth of a grain of a morphine salt. During a part of this time it became necessary to use opiates externally also. The disagreeable dreams produced by the morphine induced me to give her in its place a third of a grain of extract of belladonna, on the 14th of March, at supper time. About 10½ P.M., having had sudden faintness and vomiting within a few hours, there was so much sinking of the pulse that she was stimulated by the aromatic spirits of ammonia. A little before midnight Dr. John Ware saw her with me again. Examinations led to no satisfactory result. The pain was quieted from this time by the use of laudanum, given by injection, in drachm doses. One drachm daily was, in general, sufficient to quiet the pain enough to allow of sleep. There was occasionally need to use hydrocyanic acid to check the nausea, but otherwise no medicine but the laudanum was used, until the 7th of April, when nitrate of silver was substituted for the acid. It was not tolerated, and on the 10th was omitted. After the 1st of May, she was so unpleasantly affected by the laudanum, that she tried to dispense with it. I was satisfied, however, that nothing else would be tolerated, and expressed that opinion freely.

On the 7th of May another practitioner took charge of the case, and the opiate was discontinued. From the description of the medicine given, I have no doubt that it was tincture of Indian hemp. He was in attendance for two weeks or more, at the end of which time the patient resumed the laudanum injections, as the only means of relief from the insupportable pain. These injections were continued up to the time of death. She seldom vomited until a few weeks before her death, and the substance rejected was frothy mucus. About a week after my attendance was discontinued, she vomited a liquid with considerable black sediment. This appeared several times, and a vial of it was sent to me for examination. It was examined by Dr. Ellis, and was found to be

partially digested blood, mixed with epithelium, fat and vegetable matter, undoubtedly broth. The day before death, I saw her in the morning. She then seemed sinking gradually. For several days there had been black, offensive discharges from the bowels, and the vomiting as before. That afternoon and night there were several discharges of partially coagulated blood. She died soon after 8, A.M., of the 16th of June, retaining her consciousness till within a short time.

An examination was made of the body at 4, P.M., by Dr. Ellis and Mr. John Homans, Dr. John Ware and myself being present.

The liver was of a dark green color, very soft, and crepitated under pressure like the emphysematous cellular tissue. On incision, the substance throughout presented a delicately reticulated or spongy appearance, and was saturated with bile. After being thoroughly washed in water, nothing remained but the firm ramifications of the bile ducts. The latter, although of very small size, arose abruptly from others which were much dilated, this point being well shown, the specimen having been previously injected by Mr. John Homans, Jr. The dilatation involved all of the larger ducts extending backward from the pancreas. The gall-bladder was distended by dark-green bile, and contained ten or twelve irregular blackish calculi, about a quarter of an inch in diameter. The right extremity of the pancreas was considerably enlarged and very firm. Its granular structure had at this part disappeared, and was replaced by a dense homogeneous tissue, which did not present the usual characters of malignant disease, either to the naked eye or when examined with the microscope. The duct behind the thickened portion of the gland was considerably dilated, but, by using a little force, a probe of small size passed into the intestines, through the contracted portion beyond.

The kidneys were stained by bile, and contained much fatty and granular matter.

The large intestine contained much dark, thick liquid, which resembled blood, but no globules were found, on examining it with the microscope. The other organs, with the exception of the head, were examined and found normal.

TREATMENT OF THE ASPHYXIA CAUSED BY CHLOROFORM.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—I noticed in a late number of the *Philadelphia Medical and Surgical Reporter*, the statement that Langenbeck, of Berlin, successfully performed the operation of tracheotomy for asphyxia and apparent death from chloroform; hence the following.

During the past winter, I have had occasion to perform a number of experiments upon animals—cats and dogs principally. To

reduce the animals to a state of get-at-ableness, and to prevent interruption to my operations, I have generally administered chloroform; but, to produce complete anæsthesia, particularly in a cat, necessitates very large doses; and I often found that, when I had arrested all the voluntary motions of the animal, the effect was made permanent by the stoppage of the involuntary motions. I observed, too, when the animal lay upon its back, while under the full influence of anæsthetics, that the respiration was often stopped, or else impeded; and when it lay upon its breast, with the mouth turned downward, this did not happen. I could find no explanation for this, except upon the supposition that the tongue fell backward from its natural position, in such a manner as to close the air-passages leading to the lungs, thus preventing the entrance of air into the organs of respiration. I have never noticed this, while the animal possessed any voluntary motion, or power sufficient to hold the tongue in its normal position during respiration. Often, too, when an animal stopped breathing, respiration was immediately resumed, if not too long stopped, by drawing the tongue forward with forceps, partly out of the mouth, and sometimes resorting to artificial respiration. Since the learning of this fact, when performing experiments upon such subjects, I have always confined the tongue partly out of the mouth, and by so doing my animals always live, unless they die from causes extraneous to the results of anæsthesia. I think, if due attention is given to these facts, that most, if not all, of the animals which die by anæsthetic cause, during experiments, may be saved; which is a great desideratum, in the neighborhood of an experimenter or a medical college, where numerous experiments render it difficult to obtain them.

Now, was tracheotomy necessary in the case in which Langenbeck operated? I think not, and its success adds to the truth of this assertion. If he had drawn the tongue forward, partly out of the mouth of his patient, I think the result would have been the same. What other explanation for the success of the operation can be given? I am not aware that pseudo-membrane, or other obstruction, is developed in the air-passages by the administration of anæsthetics. The obstruction must have been between the mouth and cricoid cartilage, and, without doubt, that obstruction was the tongue.

Generally, patients undergoing any operation, from the extraction of a tooth to the amputation of a limb, while under the influence of anæsthetics, are either placed horizontally upon the back or in a reclining position, so that if the patient lose all muscular power, the tongue would naturally fall downward and backward—thus preventing the passage of air, which requires but little change in the position of the tongue. It is not often that we hear of the death of a patient, while possessing any voluntary power.

I think one reason why ether is less fatal than chloroform, is that the anæsthetic effect of ether is not often pushed to the extent

to which chloroform is given, ether being less powerful in effect than chloroform.

I am surprised at the want of knowledge in the medical profession upon these simple facts; and I am satisfied that many of the deaths of persons thus asphyxiated by anæsthetics, might have been prevented by a knowledge and application of them.

Pittsfield, Mass., August 22, 1859.

CYRUS B. SMITH.

QUININE IN TYPHOID FEVER IN ILLINOIS.

[Communicated for the Boston Medical and Surgical Journal.]

In a communication in which some exceptions were taken relative to the statements of P. K. G., respecting the alleged abuse of quinine, "in this section," in typhoid fever, I did not intend to give in detail a treatment which would apply to all cases of this disease; but simply to state that certain symptoms designated by him as belonging to a case, did not, in my opinion, contra indicate the exhibition of twenty or thirty grains of quinine, in divided doses, though there were superadded to these other and graver symptoms, characteristic of this fever, which might indicate the use of sulphate of morphia, in connection with the quinine; following which, I should expect an amelioration of all the more prominent features of the case. After this, such sustaining treatment should be given as the case demands, which will usually be sulphate of quinine, in small doses at regular intervals, as peculiarly adapted to fulfil the indications. By its tonic properties it has a tendency to prevent a relapse, to which our cases here are very liable. Since malaria modifies the character of our cases (as evinced by the periodical return of febrile paroxysms and delirium, with intervals of less excitement), the elimination of this disturbing element is a desirable consummation, and one easily accomplished in the manner above described. This course will render the affection milder in form, and bring the graver symptoms more within control.

Particular cases, where inflammatory complications occur, require a modification of this treatment, and in most cases the local inflammation, if severe, must be subdued by moderate depletives and alteratives, before the tonic is given. In typhoid pneumonia, in some cases, I have found the exhibition of large doses, to the extent of producing a sedative effect, to be followed with satisfactory results, even in the latter stages when the patient seemed upon the very verge of exhaustion. There are patients, having certain idiosyncrasies, whom a dose of quinine will sometimes purge, and I know a couple of individuals upon whom a dose of morphia will act similarly to one of aloes. In such cases I have found other preparations of bark, or other tonics, and other preparations of opium, or perhaps hyoscyamus, answer all the indica-

tions. In the last stage of a recent case, the use of strychnine has been followed with the best results.

There are cases in which, owing to the irritability of the stomach, quinine will not be tolerated. In such instances, administered in the form of an enema it has proved effectual in this and other fevers. Again, there may be a degree of irritability or inflammation of some part of the mucous membrane of the bowels, which will not admit quinine to be given at once, until this is remedied by such treatment as the particular case demands. Especially should tonics be guarded against if from the character of the epidemic, or features of the case, there seems to be a tendency to that frequently fatal complication, hæmorrhage from the bowels.

Now as to "controlling the delirium" with sulphate of morphia, it was stating only a general rule. Every one is acquainted with the happy effects of opiates in typhoid delirium, which are often *required* to be repeated to the extent of controlling delirium, almost without respect to the quantity administered. But that there are many cases of cerebral vascular excitement or congestion, subacute inflammation, and effusion even, where the sleeping as well as the tonic potion must be administered with great caution, or withheld perhaps altogether, we are perfectly aware, even "at the West."

But in pure typhoid delirium, whoever permits his patient to pass "five sleepless nights" must do so at the risk of incurring an exhaustion which will often prove fatal. If, instead of this, he hazards a "never-ending sleep," by the exhibition of opiates, he will often have the satisfaction of saving his patient.

P. K. G. in substance renews his charge against the profession here of *harmful* exhibition of quinine, and says there "are many Oliver at the West." He seems to think that the "past four years" experience has qualified him to speak *ex cathedra* upon this point; but, with becoming modesty, he says "it is not my purpose to teach practice"! There have been some new practitioners "from the East" (some *very new*) who have taken lessons in the early months of their Western practice from some of these Western "Olivers," and from them they have learned the proper manner of administering quinine, which previously their patients had got only in minute and ineffectual doses, carefully dispensed on the point of a penknife. I do not think P. K. G. was one of these.

As I said before, there perhaps is occasionally one who has fallen into a quinine routine; but according to my observation, I have not found Western physicians, those regularly educated, *any more* routinists in their practice than those at the East, and I challenge our neighbor to prove the charges which he has made against all of our profession here by the name of

OLIVER.

Aurora, Illinois, August 20, 1859.

UNUSUAL CONDITION OF THE SKIN IN A PÆTUS.

[Communicated for the Boston Medical and Surgical Journal.]

JULY 16th, I was called to attend Mrs. ———, in her fourth confinement. On my arrival, I found the labor far advanced; the membranes having burst a few moments before. On examination, I found the presentation natural, but was somewhat surprised at feeling several little furrows running in different directions across the head. I had not time for much speculation in regard to their nature, ere the child was born. It presented a very singular appearance. The surface of the body and limbs, with the exception of the hands and feet, was covered with an adventitious substance, resembling in color and structure a piece of tripe. On some parts of the head it was loosely adherent, so that it might be scraped off with a sharp finger-nail. In others, it could only be removed with a sharp knife or scalpel. The skin beneath had an old appearance, much resembling that on the head of an adult when shaved. A similar arrangement of the covering was also observed on the trunk. On the limbs, between the joints, it seemed incorporated with the skin, giving the same external appearance as was presented by the head after shaving. This was deceptive. On cutting through the apparent cuticle, the same tripe-like arrangement was found. The furrows on the head were made in the covering described, running in various directions, with no apparent regularity, varying from an eighth to a fourth of an inch in width. They were found, also, on the body, in all places where the skin would be likely to wrinkle before birth. At the bottom of these furrows, the skin was very red, and apparently very thin. At the flexures of the elbow and knee joints, the skin above shut over that below, on extending the limb—the furrows permitting the extension. The feet and hands were round, as if moulded in a cylindrical tube. The fingers and toes were of the usual length and number, but of small size and drawn down as in some states of spasm. The skin appeared as if tightly drawn, thin and shining, as if containing water; none, however, was found. The right eye was greatly inflamed in appearance; insomuch that there was extensive protrusion of the conjunctival membrane beyond the lids. All other parts were normal. The child had regular discharges from the bowels and bladder, and took nourishment from a spoon with the usual eagerness. It died the third day.

A few coincident circumstances should be named. Some two months after conception, the mother was greatly frightened by an attack of spasm in a child three years old. While in the fit, it is said this child had similar looking hands and feet with those of the new-born infant. Soon after, this same child fell down a long flight of stairs, scratching her face and arms in various places, leaving long red lines. This same girl had also a very severe

conjunctivitis, with protrusion of the membrane. It affected only one eye.

It may be asked, were these abnormal developments in any way due to the impressions made on the mind of the mother? I do not attempt to answer that question, but only state facts, and leave others to judge of their connection. D. O. PERRY, M.D.

Portland, Me., Aug. 10th, 1859.

TREATMENT OF THE NAUSEA AND VOMITING OF PREGNANCY.

BY J. H. WARREN, M.D., NEPONSET.

[Communicated for the Boston Medical and Surgical Journal.]

How much has been written and said upon this subject, and what a vast catalogue of medicines have, from the most ancient to the more modern times, been recommended and tried as sure specifics; and how often has the most aspiring and faithful son of *Æsculapius* been obliged to disgorge his strong faith in them, as the nauseated patient does the most potent draught administered by his kind hand! External applications over the epigastric region have been often resorted to with a good degree of success. Perhaps the tincture of opium and brandy, or the tincture of opium alone, stands at the head of the external medicines, at least as far as my observations have extended, it having often entirely relieved the nausea and vomiting. I have in some few instances added one drachm of the tincture of iodine to one ounce of the tincture of opium, with benefit. With internal medicines I have had but little success in relieving this distressing complaint. The most efficient I have tried, is the pill of nitrate of silver and opium, recommended by our distinguished and learned friend, Prof. W. Channing. But even this little pill has failed in my hands of accomplishing the desired result.

Of late, applications to the os uteri have been recommended, with a slight show of success; upon what scientific principle, I leave others to discuss, as my intentions are only to mention some, and the success I have had in the use of them. Various agents have been suggested. The tincture of iodine has been favorably spoken of by some authors. I have applied it to the os in a few cases only, as the complaints of the patient, of a metallic taste of the iodine in the mouth, show it to be about as great an annoyance as the sickness we endeavor to remove by its use. I can conceive, however, that this agent might be of vast value in cases of scrofulous disease in this organ. Otherwise, I should have but little faith in the use of it, so long as we can have recourse to other agents less objectionable in their effects, and equally as potent as the iodine, in assuaging the distress of this unpleasant complaint, and more especially if there exists any inflammation of

the mouth and neck of the womb, a very common concomitant affection now-a-days, as every practitioner knows, with pregnancy. What is better here than the nitrate of silver? Its result in reducing inflammation and ulceration is an established fact, and it will prevent nausea and vomiting in pregnancy, if properly applied to the os and cervix uteri, as well as iodine, and that without the unpleasant taste in the mouth.

In passing upon applications to the uterus in these cases, I would take the liberty of calling attention to the application of the tincture of benzoin and chloric ether, which I have been using with as good an amount of success, as any agent I have employed, and it has the advantage of being very simple. I would particularly recommend it where there is much neuralgic pain and excessive leucorrhœal secretion. I have found nothing so beneficial in these last-named accompaniments, as this preparation. By adding a few grains of acetate of morphia to this, it will also be found a very efficient remedy in painful menstruation, and will seldom fail, in the practitioner's hands, of giving ease and comfort to the female, during this her much-dreaded period, if applied just before or at the commencement of menstruation. It should be painted upon the os and cervix, once in three or four days; and may be continued throughout the whole period of pregnancy without any unpleasant effects. My formula for this preparation:—R. Tinct. benzonii c. ʒii.; chloric ether, ʒi.; acet. morphia, grs. ii. M. These applications should not only be made to the mouth of the womb, but should extend to the neck, if we wish to gain a favorable result from them. If the silver be used, it cannot be applied too lightly; a very slight pencilling is all that is required. If applied so as to produce sloughing and discharges, it will fail of accomplishing our desires. Are not the good effects of these applications to be accounted for, from the fact that they form a protecting coat over the congested and abraded uterine mouth and neck, that may take place in the impregnated uterus, thereby allaying the irritation of the external uterine nerves and vessels, by equal pressure and protection from all external influences of vagina and other sources? I should be happy to hear the result of the use of these preparations in the practice of other medical gentlemen.

In addition to the above, I have used injections of Ferri aluminis, ʒi.; inf. opii, ʒ ii.; aquæ dist., ʒviii. M. with some benefit. These can be used where it would not be expedient to employ the speculum. I sometimes substitute iodide of zinc for the alum. This is more applicable to those cases where there is slight spasmodic action in this organ, or in the neck of the bladder. I use five grains of zinc to the ounce.

ON THE EXTERNAL USE OF MEDICINE.

BY J. B. THOMSON, L.R.C.S., EDINBURGH, RESIDENT SURGEON, GENERAL PRISON,
PERTH.

My attention has been drawn to this subject by an article from the *Bulletin Général de Thérapeutique*, "on the best form to be given to certain pharmaceutical preparations intended for external use."

The author, M. Deschamps, arrives at the general conclusion, in which I concur, that therapeutical agents may pass through the skin, diffuse themselves in the system, produce physiological effects, and be expelled by the ordinary passages. As to the question, in *what forms* these agents may be introduced through the skin so as to produce their therapeutical effects, I differ somewhat from M. Deschamps, and on this point I beg to offer the results of my professional observation and personal experience for several years.

1st, *Of Oily and Greasy Applications externally.*—M. Deschamps alleges that these do not possess any great therapeutical efficacy. I have been long convinced of the contrary, and the proof seems to my mind satisfactory. During seventeen years' observation, in a district where the population is much employed in woollen manufacture, I came to the following conclusions, viz.: that puny and weakly children, in a few weeks after entering the woollen mills, exhibit a marked improvement in physical appearance; that the oils (chiefly olive) among which they work pass into the system by the skin in considerable quantity, relieving scrofulous complaints, and improving the general condition of the operatives. Further, this opinion is established by a comparison of the increased weights of those working in the more oily departments—by the comparative weights of those young persons employed in the cotton and those in the woollen factories—by a comparison of those in the woollen factories and those without, in the same locality—and by the declension in weight when individuals are taken from the more oily to the less oily occupations of the factory.

Applied as medicaments, we have the testimony of various practitioners of note to the efficacy of oil-inunction, and especially of Professor Simpson, who has written a valuable pamphlet on the subject. M. Deschamps tells us that he composed a soap with iodide of potassium, and after rubbing it four times upon his epigastrium, and analyzing the urine in the intervals of the frictions, he found it to contain appreciable quantities of iodine. Let him try the experiment with 3ij. of the iodid. potass. to ʒj. of lard, and he will find the same result; or let him rub into the epigastrium 3j. of tr. opii and ʒij. of olive oil, and within half an hour it will very likely set him quietly asleep. At least, such is the usual result of my personal and professional experience. I think it is generally admitted that the most remarkable effects of the

external applications of mercury and iodine are in the form of unguents.

2dly, *Of Medicines of an Anodyne Nature applied externally by means of Plasters.*—I beg to add the following from my notebook.

M. S. had a belladonna plaster applied to the forehead for neuralgia. Within six hours from the application she was delirious, with pupils much dilated. The plaster was removed, and the delirium and dilatation went off. The experiment was repeated with the same result.

A. L. had a belladonna plaster applied to the pit of the stomach, and soon after became surprised at the incoherency of her ideas, and wandering state of her mind. The pupils were dilated also. The plaster was removed, and the symptoms went off. I repeated the application, and the same results followed. In at least six other cases, I have seen the same effects.

Opium plasters, applied to the stomach, I have in several instances found also to produce narcotic effects.

In two of the cases, where the belladonna plasters were applied to the lumbar region, the symptoms were more slightly observable; and my experience of the external application of medicines leads me to the belief that these are *most effectual* when applied to the *epigastric region*.

3dly, *Of medicines externally applied, tinctures* have been found in my hands most rapidly absorbed. Take the following examples:—

M. N. had occasional attacks of delirium tremens, under which she became excited and sleepless. When she first applied to me, I gave her forty drops of the liquor morphiæ, repeated within three hours without any effect, during two successive nights. The third night, thirty drops of the tr. opii were rubbed upon the epigastrium, after which a quiet night ensued. This patient came frequently under my care for the same complaint, and I always found the friction of half a teaspoonful of tr. opii induce sleep. Taught by this case, I have not for many years given opium internally (but have been generally successful with the above treatment) in such cases.

W. R., subject to periodic attacks of insanity, attended with sleeplessness. I seldom could bring on complete sopor, but a subsidence of his violence generally followed the rubbing on the epigastrium of a teaspoonful of tr. opii.

In cases of intestinal spasm, where laudanum and ether given inwardly failed, I have often seen relief speedily ensue from laying over the abdomen hot cloths sprinkled with a teaspoonful of tr. opii or tr. hyoscyami.

In order to be thoroughly satisfied of the *post hoc* and *propter hoc* in my practice of endermic medication, I have experimented largely upon my own person with narcotics.

After infriktion of the epigastrium with half a teaspoonful of laudanum (which I have tried 50 or 60 times) I have experienced as follows:—The pulse rises—the ideas increase in activity—incoherence and confusion ensue—a sense of fulness in the head—perspiration—and in from 20 to 25 minutes after the application sleep unconsciously takes place.

With chloric ether and sulphuric ether very similar effects follow:—the pulse rises and becomes full—perspiration succeeds—then incoherency of ideas and sleep. In some instances, with chloroform, chloric ether, sulphuric ether, laudanum, and tr. hyoscyami, if complete sleep does not occur, there is excitement and dreaming, and for at least twelve hours a sense of drowsiness.

I have experimented on the different effects of these substances on different parts of the body:—If applied to the frontal or occipital region the same takes place—rubbed into the hands and feet, rather more is required, say a teaspoonful of the above-named narcotics; but I find that the epigastrium more rapidly and successfully absorbs all these substances.

I have observed that the conditions of the system, especially the state of the stomach, deserve to be attended to particularly. If the endermic medication is made when the stomach is disordered, or while in a state of repletion and actively engaged in the process of digestion, the disturbance of the system is greater, and dreams and confused imperfect sleep are the result.

In smaller doses than I have mentioned, the narcotic, when repeated every three or four hours, slowly but surely produces soporific effects.

The practical lessons I learn, from ample trials made upon my patients and upon myself for many years, are as follows:—

1st, That endermic medication is entitled to much greater attention by the general practitioner than it has received. The endermic, or, as it was at one time called, the iatroleptic, method of medication seems to me to have been almost altogether ignored by the profession. I find almost entire scepticism on the subject prevail as to the possibility of introducing agents through the unbroken skin of the human body. When a student, I was indoctrinated into the belief, from the professorial chair, that the epidermis must be first removed by a blister, and the denuded part powdered with the medicament, before cutaneous absorption took place; and even then it was trifling, and only strong poisons could be so absorbed into the system efficaciously. I hold very different views indeed; nor am I without the concurrent testimony of a few medical authorities.

Several physiologists agree in having proved that water, at 82° of Fahrenheit, is taken into the body, giving increased weight. Several alkaline substances, rhubarb, and coloring matters, dissolved in baths, have been detected in the urine of those subjected to baths holding these substances in solution. Vaccine vesicles

have been procured without puncture, by keeping lymph in contact with the unbroken skin, and excluding it from the air by a coating of blood. Vegetables and some small animals, steeped in laudanum, are paralyzed. An aqueous solution of opium produces this effect on the barberry and the sensitive plants; on the frog and the mouse. Dr. Christison admits that opium has been known to act through every channel by which it can pass into the system, by the unbroken as well as the broken surface; and I doubt not, in these days of refined and ingenious systems of poisoning, may be used as a poison. A case is narrated where an opium poultice to the blistered scrotum produced profound sopor, and the cause was happily discovered in time to save life. A child of two months old nearly perished from a cerate, containing fifteen drops of laudanum, kept twenty-four hours upon a slight excoriation; insensibility and convulsions having supervened therefrom. A soldier having erysipelas was ordered a lint-seed meal poultice with fifteen drops of laudanum sprinkled on it, and next morning deep sleep, convulsions, twitching and death followed. The attendant had thoughtlessly poured on and soaked the poultice with laudanum to the extent of an ounce. Added to these facts, we have the certain results of mercury, iodine, &c., to prove that endermic medication deserves a higher consideration in medical practice than it has yet received from the profession.

Another lesson from these facts is:—

2d, That the evil effects of opiates introduced by the mouth may be, and ought to be, avoided by the adoption of endermic medication. Where there is biliary disorder, the internal administration of narcotics is often injurious, by impairing the tone of the intestinal canal; and my own experience leads me to the assurance that the external application is at least equally efficient as a remedy. In inflammation of the stomach and bowels, opiates internally produce constipation, diminishing the vital energy of the whole canal at the very time when every effort is called for by the *vis medicatrix* to arrest and repair disease and disorganization. The application of narcotics *ab extra* seems to lead to their absorption into the blood, so that they act generally as well as locally on the system.

In conclusion, I am glad to see the papers of Dr. Alexander Wood, Dr. W. B. Richardson, and others, bearing upon the action of medicaments, applied *ab extra*. As to the voltaic narcotism of Dr. Richardson, it seems to me that its results are due to local absorption; and similar results follow the simple topical application of narcotics, and especially if friction is used. I have no doubt, however, that in many instances, the stimulus of electricity powerfully aids the cutaneous absorption.

If these observations in any way tend to impress professional readers with a belief in the value of endermic medication, my object in penning this paper will be duly attained.—*Edinburgh Medical Journal.*

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL OBSERVATION. DRs. J. N. BORLAND AND ROBERT WARE, SECRETARIES.

MARCH 2d, 1857.—*Treatment of Mammary Abscess.* Dr. CABOT, in answer to a question from Dr. STEVENS as to his opinion of the value of external applications in mammary abscess, said that mammary abscess was due to a peculiar cause, which made it differ from common abscess, and rendered it less amenable to treatment. The anatomy of the breast, with its milk tubes radiating from a central depot, has been compared to the fingers of a glove spreading out from the palm. The inflammation, caused by the plugging of one of these tubes, backs up till it reaches the depot, and then runs down the other tubes; as a consequence, the abscesses point in various parts of the breast. He thought that bandaging the breast, so as to ensure complete support, was of much benefit.

Dr. STEVENS had never seen mammary abscess cured by external applications.

Dr. CLARKE spoke very highly of the application of leeches during the time between the chill and the existence of pain, or when pain is only felt on pressure. By such application the abscess is often aborted.

Dr. BUCKINGHAM thought an abscess from lactation unnecessary. Nineteen out of twenty, he said, are the result of meddlesome treatment. He strongly objected to the usual custom of nurses, of beginning to rub the breast, or to apply the breast-pump, as soon as any pain is felt in the breast. The breast should be let entirely alone, and the child should be applied only to the well side; its nursing will cause milk enough to run from the affected side to relieve it. If both breasts are affected, the same plan should still be followed, and the child should not nurse either of them. They will swell and grow painful for from twenty-four to thirty-six hours, when a flow of milk will take place, and the trouble be relieved. Even after the formation of pus, the let-alone treatment is the best; the application of leeches only increases the pain. He first saw this treatment, with the addition of a belladonna lotion, recommended in the pages of the *Boston Medical and Surgical Journal*, several years ago; he had always attributed the good results to letting the breast alone, and not to the belladonna. The plan of non-interference is supported by analogy. Mammary abscess is an unknown disease among the lower animals, although he had heard of two cases occurring in cats, when it was induced by the compassion of a servant girl, who tried to milk out the teats.

Dr. PUTNAM thought it was good treatment to leech, and to keep the breast warm and moist after a chill. After the woman stops nursing, he often applies a soft, bland ointment, to satisfy her, and to make the nurse and others let the breasts alone.

Dr. E. H. CLARKE spoke in approbation of the let-alone plan of treatment, which he had followed for three or four years past, on Dr. Buckingham's recommendation. He occasionally, however, uses leeches after the chill.

Dr. BUCKINGHAM thought the same method should be followed with sore nipples. The child should be nursed only from the well side, and the milk should be allowed to flow from the affected side. If there is

much pain, the extract of belladonna, mixed to a cream-like consistence with water, and rubbed round the areola with the finger, gives some relief. Women with dark nipples rarely suffer from sore nipples, whereas those with pink ones are very liable to be troubled. The various astringent washes, which are used as preventives, he considered injurious, as they remove the oil which is secreted for the protection of the nipple, and bring on what they are intended to arrest. It was his custom to advise the application of oil before the labor, and he thought this of more service than anything, possibly because it satisfied the patient, and kept her from using the various washes advised by her friends.

Nov. 15th, 1858.—Dr. REYNOLDS said that he had had several opportunities of treating threatened inflammation of the breasts according to Dr. Buckingham's plan, and had been satisfied with the results. He had followed the plan in upward of fifteen or sixteen cases, and of these only two had suppurated. In one of these the patient was of an unhealthy and scrofulous habit, but in the other there was nothing of this to explain the suppuration, and he was inclined to attribute it to the condition of the nipples, which were very much retracted. One of the nipples was drawn out, and that breast did not suppurate; the nipple of the other was so bent, that it seemed as if the milk was entirely prevented from flowing through, and this one suppurated. He questioned if there were not some cases in which the old method of drawing out the nipple and rubbing with oil was more applicable than the let-alone plan recommended by Dr. Buckingham.

Dr. PARKS said he had followed this plan in several cases with very satisfactory results. He had limited its application to those cases in which there appeared to be distension of the breast from over-secretion of milk, and had continued to use the common methods for those cases where there was obstruction of the ducts, or actual inflammation.

Dr. COALE thought it would be a very difficult matter to persuade patients to wait thirty-six or forty-eight hours. The pain was usually severe, and the whole system in an irritated, excited state, which made the suffering more intolerable. He had been very well satisfied with the results obtained by gentle friction with camphorated oil; he had seen several cases in which very sensitive lumps had been dispersed in a few hours in this way. He always directed that the rubbing should be gentle, and be prolonged for fifteen or twenty minutes at the time. In answer to a question from Dr. WILLIAMS as to how long the oil was applied before relief was obtained, Dr. Coale said that he could not state absolutely how many hours were required, but he could call to mind cases in which, finding the breasts painful and distended in the morning, he had advised friction with the oil, and had found the symptoms relieved in the evening, or on the following morning. He had formerly been opposed to rubbing in any shape. In cases where the trouble seemed more advanced, he had derived advantage from the application of blisters; the blistering tissue was fitted closely over the breast, and often gave great relief by the amount of fluid discharged.

Dr. WILLIAMS said that patients must expect to suffer pain with any form of treating this affection, and, if the "let-alone" method promised immunity from suppuration, it was for their interest to suffer it; moreover, it could be much relieved by opiates and anodyne applica-

tions. He considered Dr. Reynolds's success very good in such a number of cases. He had himself had an opportunity of observing several cases, in which this method was adopted with very satisfactory results.

Dr. SLADE's experience with mammary abscess had been mostly at the Dispensary office, where patients usually present themselves with breasts, in which the difficulty has been allowed to run on till the only thing for the surgeon to do is to evacuate pus, or hasten its formation. In cases occurring elsewhere, in which he had tried the expectant method, he had not been satisfied with the results.

Dr. REYNOLDS remarked that patients did not usually make great objection to the method on account of the pain; they were so anxious to avoid suppuration that they would submit to anything which promised escape from it.

Dr. PUTNAM said that the apparent uncertainty of treatment arose from not considering the exact condition of the breast. In some cases the affection was of the mammary gland, and the milk tubes were obstructed; while in others, the inflammation was in the cellular tissue. In either case, if seen early, free leeching was of great advantage, and, next to this, he had derived most benefit from cold applications, the acetate of lead lotion, &c. When small knots were formed, gentle friction was of use, and it was good treatment to open the milk ducts when they were manifestly distended. There was one objection to the let-alone treatment, that, by keeping the child away too long, the secretion might fail altogether.

He thought that blistering was only the let-alone treatment by compulsion, for a patient would be very careful how she touched a freshly blistered breast, no matter what the amount of distension. He had supposed Dr. Buckingham's objection was to working at the breast with a view to get off the milk, and, no doubt, when the breast was inflamed any such handling and rubbing must be injurious.

Dr. BOWDITCH considered the wash of the acetate of lead of use in diminishing or arresting the secretion of milk. In some cases this effect had been produced sooner and more completely than was intended.

Dr. PUTNAM asked if any one had used belladonna, which had latterly been so much recommended.

Dr. SARGENT had used it in two or three cases, not to suppress the milk, but to relieve indurations. He rubbed on a piece of the official ointment as large as a pea. It seemed to relieve pain, and made the patient sleepy, but he had noticed no other effect.

Dr. COALE had tried it once, without much benefit; it made the patient thirsty, and set her head swimming. He spoke of the use of breast pumps, and thought that a part of the harm they did was due to their faulty shape. They ought not to be used at all as made at present. The sharp edge of the cup presses upon the tubes where they enter the nipple, and must obstruct the flow of milk through them, thus defeating the very object with which the pump is used.

Dr. ELLIS asked Dr. Putnam for how long a time after the apparent disappearance of the milk, it could be recalled by the application of the child.

Dr. PUTNAM said that he had known the secretion to be recalled after a suspension of two or three weeks, but he could not say exactly up to what period this was possible.

Dr. SARGENT said that he had not understood Dr. Buckingham to say that suppuration would be avoided in all cases by letting the breast relieve itself, but that a discrimination must be made between those cases in which inflammatory exudation had, and those in which it had not, taken place. In the latter, suppuration might always be avoided, and in the former it was, to say the least, not more likely to ensue if the breast were let alone.

JANUARY 17th, 1859.—Dr. E. H. CLARKE read the history of a case which presented an unusual (submaxillary) form of mammary abscess. In the discussion which followed, Dr. MINOR said that he thought the formation of an abscess in the breast was sometimes prevented by strapping with adhesive plaster. It was his habit, after the chill, to compress the breast in this way, and to give a cathartic, which will produce watery discharges, and this course had seemed in some cases to prevent the threatened suppuration.

Dr. CLARKE thought that abscess was rarely, if ever, prevented; possibly it was in a few instances by leeches applied early, but not by strapping, which method he had tried without avail.

Dr. HODGES said that he should suppose the advantage of strapping a breast, with a view to the prevention of abscess, would be from the support thus afforded, rather than from the compression produced. Entire support was, he thought, one of the chief requisites in treating inflamed breasts.

Dr. PARKS referred to Dr. Clarke's opinion that a really inflamed breast was rarely, if ever, prevented from suppurating, and said that, though this was perhaps true as a general rule, cases did occur in which there were chills, with pain, redness and swelling of the gland, but not resulting in the formation of pus. He called to mind especially one case, where symptoms had existed for some time, and spongopiline was applied with a view to hasten suppuration, which it was supposed must necessarily occur; but relief followed, and no pus was formed. He had lately treated several cases of acute engorgement of the breast with quarter-grain doses of antimony, producing nausea and vomiting, with relief to the symptoms, which had been very severe.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 1, 1859.

SANITARY MATTERS.—Most our readers are familiar with the reports which are circulated daily about the condition of the river Thames, and the extreme discomfort, not to say danger, to which the inhabitants of London are subjected, in consequence of the foul and noxious emanations which arise from it. Notwithstanding all the precautions which have been taken, the houses of Parliament have been subjected to serious inconvenience from their vicinity to the river, and we read that the ponderous wheels and screw of the *Great Eastern*, when set in motion for the first time, stirred up such powerful odors from the reeking tide as greatly annoyed those who were partaking of the banquet on board. The remedy for this state of things which seems

most likely to prove successful, should it be adopted, is to construct a closed canal along each bank of the river, to receive the contents of the sewers, and conduct them below the city, where they may be transported to different places, to serve as manure.

The expense of this undertaking would be gigantic, but the necessity for it is such that it will doubtless be accomplished ere long. In the mean time a similar enterprise has been achieved in Paris, as will be seen from the following extract from a letter, which we take from the *London Lancet*.

"The termination of the great conductor beneath the pavement of Paris is regarded as an immense success by the engineers connected with the enterprise. This gigantic drain is considered one of the wonders of modern engineering, and is destined, it appears, to form the great artery of a system of sewerage which has long been in contemplation both for the salubrity of the city and for economy at the same time. Two of these stupendous drains are to be constructed in a line parallel with the Seine, and to conduct the refuse waters of the city into a vast reservoir, whence they are to be disseminated as liquid manure over the most barren of the plains around Paris. The system adopted is that experimentalized at Berlin with such eminent success that the sandy plains in the midst of which that city is situated have been converted, within the space of a few years, into the richest meadow land in the whole of Northern Germany. The new system, which will come into action in October, is considered one of the greatest benefits conferred as yet upon the inhabitants of Paris by its very liberal municipality."

The time is not far distant when the necessity for a similar undertaking in our city must be seriously contemplated. The introduction of an abundant supply of water, while it has served to purify the city, has corrupted the waters which surround it, into which the sewers pour their contents. The amount of solid matter which is thus poured into our harbor is prodigious, and where it is not washed away by the current, forms deposits which, besides their deleterious influence on the health of the inhabitants, will soon prove a serious evil by filling up the docks. Last year we were struck with the accumulation of this soil in viewing the opening of the drain at the bottom of Mount Vernon Street, where the current had been obstructed by building a sea-wall; it has become necessary to extend the drain beyond the wall, in order that its contents might be carried away by the tide. The area of Boston is rapidly extending; now that the work of filling up the Back Bay is pushed forward so vigorously, we may soon expect to see a new city built there, whose sewers will empty into the river, on the opposite side of the Mill-Dam. The obstruction to the shipping will become greatly increased, and the area of the harbor will be in danger of becoming seriously encroached upon, unless some other means be adopted for getting rid of this deposit.

Now when we consider that the solid contents of our sewers are most valuable manure, the reason for preserving and utilizing this material becomes still more apparent. We send ships to the antipodes in search of guano, while we throw into the sea a manure as precious, and which costs us nothing. Were all the sewage of Boston preserved, and spread upon the soil, in a few years it would turn our State into an agricultural one. Instead of barren fields and sterile hills, we should have luxuriant crops, and a new source of wealth. All this is known, it has been demonstrated, as in the case of Berlin, and yet how slow are we to undertake what all acknowledge to be a most desirable and a most lucrative enterprise! Meanwhile all this golden treasure is silently but rapidly drifting out to sea, to return to us again,

but after undergoing many transformations. It serves as food for countless animals, who in their turn are devoured by seabirds. These deposit a portion, in the form of guano, upon the desolate islands of the Pacific, whence it is brought with much expenditure, of toil and treasure, to be spread upon our lands, and to undergo again the same routine.

We have made but a passing allusion to the effect on the public health of this deposit, upon the shores of the river and harbor. The sulphuretted hydrogen which it evolves is well known to be a most noxious agent, and if any further proof of its presence were needed than its intolerable odor, its effect in blackening silver door-plates and knobs will satisfy any one, we think, who will take the trouble to walk through Charles street. An uncompleted sea-wall allows a great accumulation of foul material along the shore, of which the citizens in that quarter have the full benefit when the tide is low and the wind westerly. There has been a remarkable prevalence of easterly breezes throughout the summer, and it is doubtless owing to this dispensation that no very fatal epidemic has prevailed in the western part of our city during the present season. Had the season been as hot as usual, it is probable that the number of deaths from bowel complaints would have exceeded even its present high proportion.

INHALATION OF CHLOROFORM IN HYSTERIA.—Dr. Briquet, in a paper on hysterical convulsions, in the *Archives Générales de Médecine*, recommends the inhalation of chloroform during the paroxysm, a treatment which he has scarcely known to fail.

He says that hysterical patients are so susceptible to the influence of this agent, that a very small quantity is sufficient to produce sleep; while their convulsive state gives them a muscular power and a vital force which entirely protects them from the accidents which sometimes result from the administration of chloroform to debilitated subjects: neither convulsions, coma, somnolence nor syncope are noticed. The small number of subjects who do not yield to this mode of treatment are those who are physically very powerful, who are of a sanguine temperament, and whose attacks are very violent.

In those cases in which the hysterical paroxysm is preceded by pain in the limbs or trunk, the topical application of chloroform often relieves the pain, and prevents the convulsions to which the latter gives rise.

INGENIOUS DEVICE.—We notice in a New York newspaper, an advertisement, half a column long, headed "Health of American Women," setting forth the virtues of the "Graefenberg Medicines." The proprietor of these medicines, or the "Graefenberg Company," represented by Dr. Bridge, a "regular physician, of fine attainments and of great judgment and discrimination in the treatment of disease," offers testimonials "from the Governors of two States, the Chairman of the Board of Health of New York, one of the surgeons-in-chief of the Bellevue Hospital, many clergymen—including the Rev. N. BANGS, D.D., the Head of the Methodist Church; the State Chemist and Assayer of the State of Massachusetts; the Mayor of New York City; the United States Commissioner to Great Britain; the proprietor of Barnum's Museum, and many other public men," &c. There is nothing surprising in all this, for many of the above names are attached to

other quack medicines, and there is a frankness in placing the "proprietor of Barnum's Museum" on the list, which is quite refreshing. We confess, however, we were not a little surprised to see the names of several of the most eminent New York medical men appended to the advertisement. While we were wondering how these names could possibly have been procured, a closer examination showed that though they are printed in a conspicuous manner, so as to appear at first sight as if endorsing the wonderful virtues of the Graefenberg medicines, there is in reality no fraud, since it is only stated that "convincing and unanswerable arguments have been addressed to the leading physicians and surgeons of the day, prominent among whom were Dr. Valentine Mott, President and Professor of Surgery," and half a dozen others. We do not know what reply these gentlemen made to the convincing and unanswerable arguments, but the Graefenberg Company has not seen fit to publish them, perhaps with a view of persuading the public that "silence gives consent."

THE *New York Times* relates the case of a man's death being caused by the skinning of a rattle-snake. His thumb was accidentally cut by the knife used in skinning the snake, when his hand and arm began to swell, and in a few days death took place, the body being covered with livid spots.

The *Middleboro' (Mass.) Gazette* records the death of a boy in Plympton, from the bite of a snapping turtle—death taking place in a few days after the bite, with all the symptoms of hydrophobia.

The Medical Library of the Pennsylvania Hospital, founded in the year 1763, now contains about 11,000 volumes.

Dr. Louis Bauer, of Brooklyn, N. Y., reports a successful case of recto-vesical lithotomy. Silver sutures were used, and were withdrawn seven days after the operation, and the patient was discharged cured the next day.

Dr. Longet, well known by his valuable contributions to science, has been appointed Professor of Physiology at the Faculty of Medicine of Paris.

M. Beau, an hospital physician of Paris, has found that workmen who handle lead do not suffer from phthisis, and that the progress of this disease has been stopped by symptoms of lead poisoning.

APPOINTMENT AT THE EYE AND EAR INFIRMARY.—It gives us much pleasure to announce that Dr. ALGERNON COOLIDGE has been appointed one of the surgeons of the Massachusetts Charitable Eye and Ear Infirmary.

HEALTH OF THE CITY.—The mortality last week was large. Out of 101 deaths, 63 were of subjects under the age of 5 years, and the number of fatal cases of cholera infantum was 34. There were 7 deaths from dysentery, 6 from "infantile diseases," and 2 from smallpox. The number of deaths for the corresponding week of 1858 was 103, of which 26 were from cholera infantum, 4 from dysentery, 12 from consumption, 5 from pneumonia, 0 from smallpox, and 5 from whooping cough.

DIED.—In this city, 24th inst., Julia Parks, wife of Dr. Luther Parks, Jr.—At Ryfield Parish, Newbury, 19th inst., Dr. Charles Toothaker, 80.—At East Kingston, N. H., 27th inst., Dr. Levi B. Gale, formerly of Boston, 59.—At Sacramento, Cal., July 29, of consumption, Dr. Henry Burbeck May, formerly of Boston, 42.

Deaths in Boston for the week ending Saturday noon, August 27th, 101. Males, 46—Females, 52.—Accident, 1—apoplexy, 1—inflammation of the bowels, 1—inflammation of the brain, 2—disease of the brain (tubercular meningitis), 1—burned, 1—cancer (in the lungs), 1—consumption, 7—convulsions, 2—cholera infantum, 34—cholera morbus, 1—dysentery, 7—dropsy, 2—dropsy in the head, 3—drowned, 1—debility, 1—infantile diseases, 6—erysipelas, 1—scarlet fever, 2—typhoid fever, 2—gangrene, 1—hemorrhage (of the lungs), 1—intemperance, 1—inflammation of the lungs, 1—congestion of the lungs, 1—marasmus, 1—old age, 1—palay, 2—pleurisy, 1—disease of the spine, 1—smallpox, 2—sore throat, 1—synovitis, 1—teething, 4—unknown, 1—inflammation of the uterus, 1—whooping cough, 3.

Under 5 years, 63—between 5 and 20 years, 8—between 20 and 40 years, 14—between 40 and 60 years, 12—above 60 years, 4. Born in the United States, 82—Ireland, 16—other places, 3.